

compressed form, the OCDS makes a request to a remote computer/network, which has the content and retrieves such content for compression and editing. The distribution server compresses and edits the content, if possible, and delivers the content to the requester where it is decompressed. Content can be delivered to the requester in its original format (uncompression and/or unedited) if the compression and/or edit functions cannot be performed.

[0011] A second embodiment of the present invention provides a method, system and apparatus for delivering content from a web server to a requester through the OCDS network. The OCDS intercepts the requests made to the web server before reaching the web server. The OCDS network, in this embodiment, protects and shields the web servers from external networks. Thus, any access to the web servers is performed through the OCDS network. The distribution server retrieves the requested content from a single location (web server) if the content does not exist in the OCDS cache in an edited and/or compressed format. The distribution server upon receiving a request checks to see if the requested content already exists in an edited and/or compressed form in the OCDS cache. If the content is available in the cache, it is delivered to the requester where it is decompressed. However, if the content is not available in the OCDS cache, a request is made by the distribution server to the web server to serve the requested content. Upon receiving the content by the distribution server, the content is edited and/or compressed and delivered to the requester. If the content cannot be edited and/or compressed, the content is delivered in its original form.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] A more complete understanding of the system and method of the present invention may be obtained by reference to the following Detailed Description when taken in conjunction with the accompanying Drawings wherein:

[0013] **FIG. 1** illustrates a conventional content distribution system wherein content providers provide content to ISPs, LANs, and/or WANs through the Internet;

[0014] **FIG. 2** illustrates a content distribution system according to a preferred embodiment of the present invention in which content provision from content providers to ISPs, LANs and/or WANs through the Internet is improved;

[0015] **FIG. 3** illustrates interoperation of several network servers in a preferred embodiment of the present invention;

[0016] **FIG. 4** illustrates an overview diagram of the components of the invention with Editor according to one embodiment of the invention;

[0017] **FIG. 5** illustrates a diagram of the components of the invention with Scanner according to a further embodiment of the invention;

[0018] **FIG. 6** illustrates an overview diagram of components assembled on Distribution/Control Servers according to a further embodiment of the invention;

[0019] **FIG. 7** illustrates a flowchart for an exemplary method for a control/distribution server in accordance with the teachings of the present invention;

[0020] **FIG. 8** illustrates an additional flowchart for an exemplary method for a Hyper Text Markup Language (HTML) edit server in accordance with the teachings of the present invention;

[0021] **FIG. 9** illustrates another flowchart for an exemplary method for a compression server in accordance with the principles of the present invention;

[0022] **FIG. 10** illustrates still another flowchart for an exemplary method for an N-depth compression server in accordance with the principles of the present invention;

[0023] **FIG. 11** illustrates a flowchart for an exemplary method for a list/cache manager in accordance with the teachings of the present invention;

[0024] **FIG. 12** illustrates a diagram showing a general description of the steps used to create a compressed image within the content delivery system as well as the attributes of the resulting ".trans" image;

[0025] **FIG. 13** illustrates a diagram of the Proxy Client according to an embodiment of the invention;

[0026] **FIG. 14** illustrates an overview diagram of the Plugin according to an embodiment of the invention; and

[0027] **FIG. 15** illustrates a diagram of the internal workflow of the plugin according to an embodiment of the invention.

DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EXEMPLARY EMBODIMENTS

[0028] The following description is presented to enable any person skilled in the art to make and use the invention. For purposes of explanation, specific nomenclature is set forth to provide a thorough understanding of the present invention. However, it will be apparent to one skilled in the art that these specific details are not necessarily required to practice the invention, and descriptions of specific applications are provided only as examples. Various modifications to the preferred embodiments will be readily apparent to one skilled in the art, and the general principles defined herein may be applied to other embodiments and applications without departing from the intent and scope of the invention. In other words, the present invention is not intended to be limited to the exact embodiments shown, but is instead to be accorded the widest possible scope consistent with the principles and features disclosed herein.

[0029] The present invention relates to a content delivery system and more particularly to the retrieval of information that has been optimized for delivery through editing and compression. The Optimal Content Delivery System (OCDS) editing and compression services provided to the requesters utilize a Proxy system, a compression algorithm, proprietary editor (or scanner) and proprietary client/plugin to seamlessly deliver content from the Internet or Intranet to the requestor. For the sake of description the acronym OCDS has been used to designate an embodiment of the invention as a system as well as an embodiment of the invention as a system operating from a private network.

[0030] The delivery system utilizes a compression algorithm which is capable of compressing both lossy and lossless information. Through an editing and a caching process, the requester is able to receive requested content much faster than would be the case without the advantages of the invention, especially on subsequent requests for the initial content.